



## Boulder Regional Communications Center

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

May 25, 1993

Ms. Donna R. Searcy, Secretary  
Federal Communications Commission  
1919 M Street NW  
Washington, D.C. 20554

Dear Ms. Searcy:

Enclosed please find the comments from the Boulder Regional Communications Center on Docket #92-235. These comments are on the Notice of Proposed Rule Making regarding the replacement of Part 90 by Part 88 to revise the Private Land Mobile Radio Services and modify the policies governing them. There is enclosed one original and nine copies.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Teddy F. Vratny', is written over the typed name.  
Teddy F. Vratny

No. of Copies rec'd  
List A B C D E

A handwritten signature, possibly 'J. F.', is written over the 'List A B C D E' text.

MAY 28 1993

In the matter of )

Replacement of Part 90 by Part 88 to )  
Revise the Private Land Mobile Radio )  
Services and Modify the Policies )  
Governing Them )

PR Docket No. 92-235

Notice of Proposed Rule Making

**Background Information:**

The Boulder Regional Communications Center (BRCC), a joint operation of the City and County of Boulder, Colorado to provide emergency communications services, submits these comments to the Commission for their consideration in the above cited Docket.

The Boulder Regional Communications Center (BRCC) is an agency created by intergovernmental agreement for the express purpose of providing emergency communications services for Public Safety Agencies in the City and County of Boulder. BRCC from its headquarters at 1805 33rd Street in Boulder, CO provides public safety communications services to:

The Allenspark Fire Protection District  
The Big Elk Meadows Fire Protection District  
The City of Boulder Fire Department  
The City of Boulder Police Department  
The Boulder County Sheriff's Department  
The Boulder Heights Fire Protection District  
The Boulder Rural Fire Protection District  
The Coal Creek Fire Protection District

The Louisville Fire Protection District  
The Town of Lyons Fire Department  
The Town of Lyons Police Department  
The Mountainview Fire Protection District  
The Nederland Fire Protection District  
The Town of Nederland Marshall's Office  
The Pinebrook Hills Fire Protection District  
The Pinewood Springs Fire Protection District  
The Sugarloaf Fire Protection District  
The Sunshine Fire Protection District  
The Town of Ward Marshall's Office

Rescue Agencies also serviced by BRCC are:

Boulder Emergency Squad  
Front Range Rescue Dogs  
Longmont Emergency Unit  
Rocky Mountain Rescue Group

During Mountain search and rescue activities as well as Wildland  
Fires BRCC will provide Emergency Communications Services to:

oftentimes have 10,000 to 20,000 visitors daily to our county.

Both our residents and visitors make use of the extensive system of open space, parks and wilderness areas located in the mountainous reaches of our county. And the mountains also support a healthy population with communities such as Nederland and Ward located 8200 feet and 9300 feet above sea level. The peak to peak highway running from Nederland through Ward, up to the base of Longs Peak seldom dips below 8000 feet above sea level and in some places is over 9400. In addition to the permanent residents in these official towns, there are settlements throughout the mountains with year round residents. There are many more seasonal residents and the growth is estimated that there are 4000 more lots which can be developed in the mountains. It is not unusual for residents to utilize the mountains for recreation. In my own case, I like to take off early in the morning from my house and head up into the mountains for a day of trout fishing. I live in the foothills at about 5500 feet above sea level and a quick 30 minute drive up either of two river valleys I can park my car at National Forest Service area at 10,000 feet above sea level. Another 30 minute

It is with this information as a background that BRCC would like to

flats. Having two different bandwidths, a federal and PLMR would be against the idea of interoperability and would not make sense. Based on calculations we have seen published by APCO and others the net gain of useable frequencies is almost the same with a 6.25KHz than the proposed 5 KHz bandwidth.

#### Conversion Timetable:

The commission has proposed a two step conversion process to achieve the reduction in the bandwidth. We would propose that this be changed to a one step change. We would propose that the timetable as noted in section 88.433 and detailed in section 88.1601 be the only timetable. This is of course, based on our proposal of a 6.25KHz bandwidth. We see little benefit to the PLMR of the 1996 reduction, in terms of gaining additional useable frequencies. The idea that most radios in service today can be modified may be generally true, but there are significant numbers of radios in limited service that are too costly to be modified and will have to be junked. In Boulder County, we have assembled a reserve supply of radios that are issued during major Wildland fire or flash flood operations. These radios are older, mostly single frequency radios that provide basic communications with remote crews during major fire and flood operations. This means junking these units while gaining no appreciable benefit from the interim bandwidth reduction. Since most radios purchased by units of local government are geared to a replacement cycle that is around 10 years, a one timetable program will work into the proposal in section 88.433.

#### Conversion Cost Issues:

Coupled with the previous comment, cost becomes the issue. The basic conversion to make the proposed 1996 bandwidth reduction will cost an estimated \$60,000 for BRCC and all of the agencies served by BRCC. This assumes that the commission's figure of \$30 and \$15 are accurate and that equipment can be modified. Those are two very big assumptions. The option becomes buying something that may or may not work in 2005, particularly if the 6.25KHz bandwidth for VHF is not adopted. As noted in the introductory material, Colorado units of government are under limitations for taxing and spending which will severely inhibit our ability to adapt to mandated costs, such as are required by this NPRM. The longer we have to plan or make a gradual transition to a new bandwidth the better off we in Colorado will be. In fact, a single date for transition, with equipment becoming available on the market soon, may be the only way an agency in Colorado will be able to comply

play such a major role in our County.

HAAT and ERP:

I am sure that numerous commenters have reminded the commission that the earth is not flat, but it is a point worth emphasizing. We took great pains in our background information to draw a topographical representation of our county. This representation hopefully identified for the commission that there are some very real problems and issues in providing radio coverage, right here in Colorado. The Commission in its appendices and discussions seems to indicate that adoption of cellular type technology will overcome the HAAT and ERP limitations contained in the NPRM. That is not true! Cellular systems in the Boulder County area have expanded tremendously, almost every other car sports a cellular antenna. New cell sites are going in monthly, expanded and improved coverage, yet in the past six months I have been forced to remove a cellular emergency call box because I could not get consistent cellular coverage. Boulder Canyon is the major canyon out of the city of Boulder up into the mountains of Boulder County. A couple of years ago we undertook a program to install emergency call boxes along major traffic and recreational areas to enhance the public's ability to reach emergency service providers. In Boulder Canyon, there are no hard wire phone lines or cable lines, my only choice was to utilize cellular technology. Two call boxes were installed in the canyon, one about a third of the way up the canyon and the other two thirds of the way up the canyon. The lower call box, is able to reach a couple of cellular sites and works fine, the upper call box cannot reliably hit any cell sites, on either cellular provider. Both cellular providers have expanded service into the mountain areas but have now completed their systems and still I cannot get a signal out of the canyon. In this same portion of the canyon it is almost impossible to receive broadcast AM or FM radio signals on your car radio, yet I have to provide public safety service and communications in this portion of the canyon. In the past six months I have had a major truck fire, a wildland fire and this past week a rolled over truck and haz mat incident in this portion of the canyon. I have to provide reliable communications to this area, I cannot realistically do this with the type of constraints proposed in the NPRM. We would propose that the commission adopt the same standard found in many of the regional plans filed under the auspices of the National Public Safety Plan. This restriction relates to signal strength outside of the service area and utilizes a signal measurement of 40dbu some three miles outside of the applicant's service area. This proposal is commonly understood in system design and is a measurable and enforceable standard. It gets away from arbitrary limits or limits that work one place and not others. This is the standard developed by the users in the National Plan and should be carried over into this docket.

Another point regarding the Commissions comment that 75 watts seemed to work for trucking companies and taxi cabs so it should work for all other users. It is worth noting that those systems

are vastly different from public safety, in both their utilization of their systems and the needs of their systems. Their systems are vehicular systems, with a large antenna plane in the roof of the car or truck, where as in public safety the portable system is the required method. Coverage in all areas is not as critical to other land mobile users as it is in the Public Safety Services, we go where others cannot or will not. As we make the change from Part 90 to Part 88, we must accept that a major engineering consideration in most public safety system is portable coverage.

**Reorganization of User Classifications:**

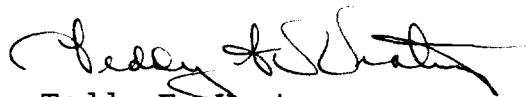
The commission has proposed to reorganize the Private Land Mobile service into three major categories, one of which is public safety. This would include many of the functions currently under Police, Fire, EMS, Search and Rescue and others. While there is some sense to this proposal, this does not recognize that there are vast differences within the Public Safety Community as to system design and utilization. We would endorse the broad classification, if within each classification there was a pool of frequencies set aside for some of the major classifications such as Police Radio Service, Fire Radio Service and Emergency Medical Radio service. We in essence support the commission's option #2 as contained in Article III, Section C, subsection 17 of the NPRM.

**Reorganization of the Coordination Function:**

In line with our above preference for distinct pools of frequencies for the major users in the Public Safety group, we would endorse the commissions option of keeping designated coordinators for these pools. Again, the need and design of some systems such as police, fire and emergency medical, as well as some local government functions, require a coordinator who is familiar and experienced with those needs and requirements.

We appreciate the opportunity the commission has afforded the users to comment on this NPRM. The extended period for comments has given users the chance to more completely asses the impact of this filing and to comment more specifically on the proposals. We have limited our comments to the major issues, there are other minor points that concern us, but as a part of the process of change we are willing to adapt and work through the minor issues. We hope that the comments we have filed will assist the commission in revising the rules as proposed for docket #92-235.

Respectfully Submitted,



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